

10598877

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 October 2006 (05.10.2006)

PCT

(10) International Publication Number
WO 2006/103686 A1

(51) International Patent Classification:
C07D 501/06 (2006.01)

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AF, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CI, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, L.C., L.K., L.R., L.S., LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:
PCT/IN2005/000094

(22) International Filing Date: 29 March 2005 (29.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2006/103686 A1

(54) Title: AN IMPROVED PROCESS FOR THE PREPARATION OF CEFIXIME

(57) Abstract: There is provided an improved process for preparing cefixime. Thus, for example, 7-amino-3-vinyl-3-cephem-4-carboxylic acid is reacted with 2-mercaptop-1,3-benzothiazolyl-(Z)-2-(2-aminothiazol-4-yl)-2-(methoxycarbonyl)-methoxyimino acetate in tetrahydrofuran and water at 4°C in the presence of triethylamine. The reaction mass is extracted with ethyl acetate. 7-[2-(2-Amino-4-thiazolyl)-2-(methoxycarbonylmethoxyimino)acetamido]-3-vinyl-3-cephem-4-carboxylic acid triethylamine salt present in the aqueous layer is hydrolyzed with sodium hydroxide in less than 30 minutes and aqueous hydrochloric acid is added immediately to adjust the pH to 4.8 to 5.2. Then, aqueous hydrochloric acid is added at 35°C to adjust the pH 2.5 and cooled to crystallize cefixime trihydrate in high purity.